

## PROJECT DESCRIPTION

## GENERAL

THIS PORTION OF THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 45 (YORK ROAD) AND GREENRIDGE ROAD DUE TO THE WIDENING OF MD 45. MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

## INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 45 APPROACHES OPERATING CONCURRENTLY AND THE GREENRIDGE ROAD / ORCHARD SQUARE APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND MD 45.

PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE NORTH, EAST AND WEST LEGS. ALL PEDESTRIAN SIGNAL HEADS WILL BE COUNTDOWN TYPE.

## CONTROLLER REQUIREMENTS

FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SIX (6) TWO-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

## SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410)-787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

## PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-2781

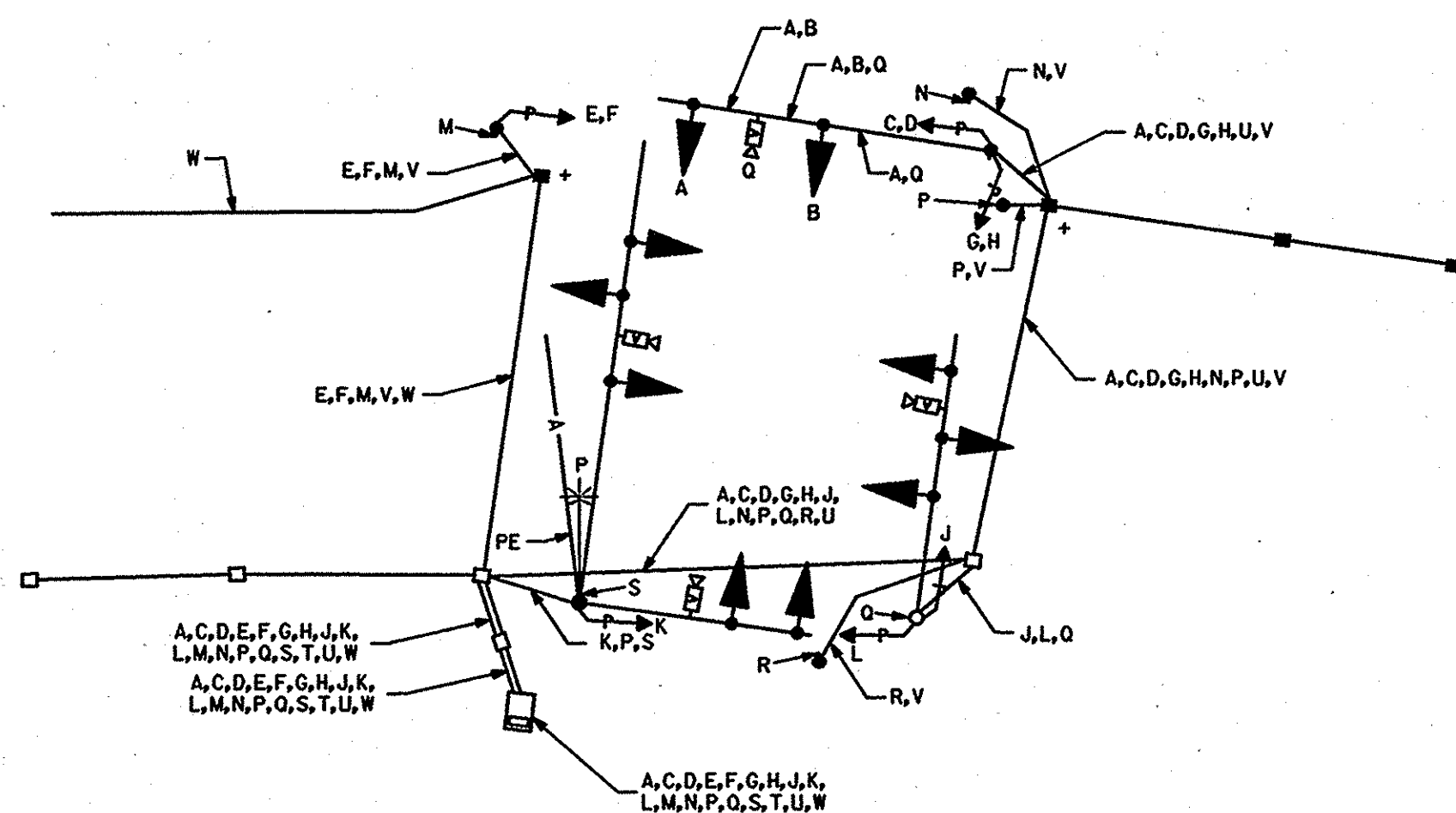
MR. MIKE PASQUARIELLO  
DISTRICT UTILITY ENGINEER  
PHONE: (410) 321-2841

MR. STEVE MARCISZEWSKI  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-2761

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

## WIRING DIAGRAM

A } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
B } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
C,D,E,F } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
G,H,J,K,L } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
M,N,P } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
Q,R,S } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
T } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)  
U } VIDEO DETECTION LEAD-IN CABLE  
V } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)  
W } 12-PAIR COMMUNICATION CABLE (SEE INTERCONNECT PLANS)  
PE - EXISTING AERIAL ELECTRICAL SERVICE  
+ - 3/4 IN. X 10 FT. GROUND ROD



## EQUIPMENT LIST "A"

## A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
900000	1	EA	10 FOOT BREAKAWAY PEDESTAL POLE
973023	45	SF	SHEET ALUMINUM SIGNS TO CONSIST OF : - 1 EACH M95-1-NR (MOD) SIGN (72 IN. x 40 IN.) - MAST ARM MOUNT - 1 EACH M95-1-NL (MOD) SIGN (72 IN. x 40 IN.) - MAST ARM MOUNT - 6 EACH R10-4(1) SIGN (9 IN. x 12 IN.) - POLE MOUNT
974024	1	EA	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM

## EQUIPMENT LIST "B"

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
800000	1	EA	RELOCATE EXISTING VIDEO DETECTION CAMERA
800000	5	EA	16 INCH PEDESTRIAN LED SIGNAL HEAD SECTION - POLE MOUNT (COUNTDOWN)
800000	1	EA	16 INCH PEDESTRIAN LED SIGNAL HEAD SECTION - PEDESTAL POLE MOUNT (COUNTDOWN)
800000	6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION
801004	9	CY	CONCRETE FOR SIGNAL FOUNDATION
802501	300	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805140	480	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805155	300	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
811001	5	EA	INSTALL ELECTRICAL HANDHOLE
813006	8	SF	RELOCATE SIGNS FROM EXISTING OVERHEAD STRUCTURES
813014	5	SF	INSTALL GROUND MOUNTED SIGN
813015	40	SF	INSTALL OVERHEAD SIGN
816010	1	EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818004	3	EA	10 FOOT BREAKAWAY PEDESTAL POLE
821003	4	EA	BREAKAWAY BASE SUPPORT SYSTEM FOR SIGNAL STRUCTURE
831010	1	EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
837001	2	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860270	6	EA	8 INCH VEHICULAR LED TRAFFIC SIGNAL HEAD SECTION
860284	32	EA	12 INCH VEHICULAR LED TRAFFIC SIGNAL HEAD SECTION
860292	1	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	1000	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861106	1500	LF	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
861107	30	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	300	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
866104	1	EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
866204	1	EA	INSTALL STEEL POLE AND SINGLE MAST ARM
873001	1	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT

## PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 + 5	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 1 + 6	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 6 CHANGE	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 5	R	R	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
2 + 5 CHANGE	R	R	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	W	W	W	W	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	FL/DW	FL/DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT.	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	W	W
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW
4 + 8 ALT. CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

## EQUIPMENT LIST "C"

## C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

## PHASE 1



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MARYLAND 45 (YORK ROAD) WIDENING  
CAVAN DRIVE TO RIDGELY ROAD

GENERAL INFORMATION - MD 45 at Greenridge Road

SCALE NONE DATE 8/4/87 CONTRACT NO. BA7065171

DESIGNED BY W.R. SMITH COUNTY BALTIMORE  
DRAWN BY W.R. SMITH LOGMILE 03004503.41  
CHECKED BY C.R.M. T.I.M.S. NO. E159  
F.A.P. NO. SEE TITLE SHEET TOD NO.

DRAWING NO. SS-02 OF SS-25 SHEET NO. 70 OF 137

McCormick  
Engineers & Planners  
Since 1946 Taylor

509 South Exeter Street  
4th Floor  
Baltimore, Maryland 21202  
(410) 662-7400

BY: WJWARNER